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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,288	10/27/2003	William A. Yarbrough	60,580-003	2777

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EXAMINER	
CAVALLARI, DANIEL J	

ART UNIT	PAPER NUMBER
2836	

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/694,288	YARBROUGH, WILLIAM A.	
	Examiner	Art Unit	
	Daniel J. Cavallari	2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 October 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/27/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 10/27/2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "20C" and "20D" have both been used to designate the "coupling terminal" (See Specification Paragraphs 16 & 17). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The specification is objected to for the following reasons:

- Reference characters "20C" and "20D" have both been used to designate the "coupling terminal" (See Specification Paragraphs 16 & 17). Reference 20C is then later referred to as the "output terminal" (See Specification Paragraph 19) making it confusing what the reference is actually depicting.

Appropriate action is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 3, 5, & 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jenkin (US 2005/0073199 A1), Robertson (US 2,745,971), & Koenig (US 6,737,762)

Jenkin teaches

- A primary (150) and secondary (170) power device taught as any combination of commercial, generator, or UPS power supplies (See Figure 8 & Paragraph 81)
- A primary (130) and secondary (180) terminal respectively electrically connected to the primary and secondary power devices (See Figure 8 & Paragraph 81)

- An output terminal (115) (See Figure 8 & Paragraph 81)
- A relay for automatically switching between the primary and secondary power device (See Paragraph 39-42, 82, & 108) including a first relay input (110) and a second relay input (109) (See Figure 7) a relay output (115)

Jenkin fails to teach:

- A relay switch comprising an electromagnet and biasing means.
- A coupling terminal electrically connecting secondary and primary power devices.

Robertson teaches an electromechanical relay for automatically switching between two power supplies (See Figure & Column 1, lines 15-19). The relay comprising a first input terminal (B1) connected to a primary power device (Line B). A second relay input (A1) electrically connected to a secondary power device (Line A) and a relay output (L1) electrically connected to the output (Load C) (See Figure). An electromagnet (13') electrically connected to the first relay input (B1) via lines 34, 36, 25, 24 & A8. An electro-magnetically actuated multi-pole activator (14) (See Figure) and a biasing means, read on by a spring, operatively connected to the activator (14) (See Column 2, Lines 36-68).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the spring biased, elelctromechanical relay taught by Robertson into the power supply device of Jenkin in which Jenkin teaches an automatic transfer switch but is silent to it's details. The motivation would have been to provide a

switch already known in the art to provide the automatic switching mechanism between the power supplies.

Koenig teaches a power supply device comprising a coupling terminal electrically connecting secondary and primary power devices. Koenig teaches a secondary power device, read on by the utility provided AC power and a primary power device, read on by the energy storage device (116) (See Figure 4). Koenig further teaches a transfer switch (406) used to transfer between the two power supply devices (See Figure 4 & Column 5, line 59 to Column 6, Line 20 & Column 6, Lines 35-67). Koenig also teaches a coupling terminal for connecting the secondary power device (utility AC power) to the primary power device (116) for supplying power from the secondary power device (utility) to the primary power device (116) (See Figure 4 & Column 5, Lines 36-58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a coupling terminal between the primary and secondary power devices taught by Jenkin. Jenkin teaches the power supply devices comprising of commercial AC power, a generator, or UPS system (See Paragraph 8) and it would take only ordinary skill in the art to couple the various system, as taught by Koenig. The motivation would have been to provide necessary power to charge or start the primary power device as needed.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jenkin, Robertson, Koenig, & Powell et al. (US 4,719,550)

Incorporating all arguments above of the switching system taught by Jenkin and noting that Jenkin teaches the use of a UPS power source (See Paragraph 8) but fails to explicitly teach an external power source electrically connected to the secondary UPS for providing power to the UPS.

Powell et al. teaches a UPS system incorporating an external power source, read on by the AC utility input (18), connected to the UPS system of Figure 1 (See Figure 1 & Column 6, Lines 28-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a UPS system with an external power source electrically connected as taught by Powell et al. into the switching system of Jenkin whereby the UPS of Powell et al. was used in place of the secondary UPS system taught by Jenkin (See Paragraph 8). The motivation would have been to provide a UPS system that was able to both supply power and charge itself from an externally provided source.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jenkin, Robertson, Koenig , & Noda et al. (JP 04209436 A).

Incorporating all arguments above of the switching system taught by Jenkin and noting that Jenkin teaches the use of a relay (See Paragraph 41 & 42) for use of the transfer switch in order to automatically switch between two power sources and Robertson teaches biasing (See Column 2, Lines 36-68) however Jenkin fails to teach the use of an air-core type electromagnet for use with the transfer switch (108) (See Figure 7).

Noda et al. teaches the use of a relay using an air-core type electromagnet read on by the no core coil (See Title). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the air core type electromagnet as taught by Noda et al. into the transfer switch (108) of Jenkin. The motivation would have been to reduce noise of the switch (See Noda et al., Title).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Cavallari whose telephone number is (571)272-8541. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Cavallari

February 8, 2006

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